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RAW SEQUENCE LISTING

DATE: 12/21/2001

PATENT APPLICATION: US/09/855,153

TIME: 15:00:48

Input Set : N:\Crf3\RULE60\09855153.txt

Output Set: N:\CRF3\12212001\I855153.raw

11 <110> APPLICANT: Reiter, Robert E.
16 Witte, Owen N.
21 Saffran, Douglas C.
31 <120> TITLE OF INVENTION: PSCA: PROSTATE STEM CELL ANTIGEN AND USES THEREOF
41 <130> FILE REFERENCE: 30435.54USI4
47 <140> CURRENT APPLICATION NUMBER: 09/855,153
49 <141> CURRENT FILING DATE: 2001-05-14
52 <150> PRIOR APPLICATION NUMBER: 09/564,329
56 <151> PRIOR FILING DATE: 2000-05-03
63 <150> PRIOR APPLICATION NUMBER: 09/359,326
68 <151> PRIOR FILING DATE: 1999-07-20
78 <150> PRIOR APPLICATION NUMBER: 08/814,279
83 <151> PRIOR FILING DATE: 1997-03-10
93 <150> PRIOR APPLICATION NUMBER: 60/071,141
98 <151> PRIOR FILING DATE: 1998-01-12
108 <150> PRIOR APPLICATION NUMBER: 60/074,675
113 <151> PRIOR FILING DATE: 1998-02-13
123 <150> PRIOR APPLICATION NUMBER: 60/113,230
128 <151> PRIOR FILING DATE: 1998-12-21
138 <150> PRIOR APPLICATION NUMBER: 60/120,536
143 <151> PRIOR FILING DATE: 1999-02-17
153 <150> PRIOR APPLICATION NUMBER: 60/124,658
158 <151> PRIOR FILING DATE: 1999-03-16
168 <150> PRIOR APPLICATION NUMBER: 09/038,261
173 <151> PRIOR FILING DATE: 1998-03-10
183 <150> PRIOR APPLICATION NUMBER: 09/203,939
188 <151> PRIOR FILING DATE: 1998-12-02
198 <150> PRIOR APPLICATION NUMBER: 09/251,835
203 <151> PRIOR FILING DATE: 1999-02-17
213 <150> PRIOR APPLICATION NUMBER: 09/308,503
218 <151> PRIOR FILING DATE: 1999-05-25
228 <160> NUMBER OF SEQ ID NOS: 27
238 <170> SOFTWARE: PatentIn Ver. 2.0
248 <210> SEQ ID NO: 1
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258 <212> TYPE: DNA
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288 <223> OTHER INFORMATION: any nucleotide (i.e., a, c, g or t)
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313 <223> OTHER INFORMATION: any nucleotide (i.e., a, c, g or t)
323 <220> FEATURE:
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558 tgcagccagg cactgccctg ctgtgtact cctgcaaagc ccaggtgagc aacgaggact 120
563 gcctgcaggt ggagaactgc acccagctgg gggagcagtg ctggaccgcg cgcacccgcg 180
568 cagttggcct cctgaccgtc atcagcaaag gctgcagctt gaactgcgtg gatgactcac 240
573 aggactacta cgtgggcaag aagaacatca cgtgctgtga caccgacttg tgcaacgcca 300
578 gcggggccca tgccctgcag ccggctgccg ccaccccttc gctgctccct gcactcggcc 360
583 tgctgtctctg gggaccgggc cagctatagg ctctgggggg ccccgctgca gccacactg 420
588 ggtgtggtgc cccaggcctt tgtgccactc ctcacagaac ctggcccagt gggagcctgt 480
593 cctgggttcct gaggcacatc ctaacgcaag tttgaccatg tatgtttgca ccccttttcc 540
W--> 598 ccnaaccctg accttcccat gggccttttc caggattccn accnggcaga tcagttttag 600
W--> 603 tganacanat ccgentgcag atggcccctc caaccntttn tgttgntgtt tccatggccc 660
W--> 608 agcattttcc accttaacc ctgtgttcag gcacttnttc ccccaggaag ctttccctgc 720
613 ccacccatt tatgaattga gccaggtttg gtccgtggtg tccccgcac ccagcagggg 780
618 acaggcaatc aggagggccc agtaaaggct gagatgaagt ggactgagta gaactggagg 840

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623 acaagagttg acgtgagttc ctgggagttt ccagagatgg ggccctggagg cctggaggaa 900
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653 <212> TYPE: PRT
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678 <222> LOCATION: (50)..(64)
688 <220> FEATURE:
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698 <222> LOCATION: (71)..(82)
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718 <222> LOCATION: (67)..(81)
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738 1. 5 10 15
748 Pro Gly Thr Ala Leu Leu Cys Tyr Ser Cys Lys Ala Gln Val Ser Asn
753 20 25 30
763 Glu Asp Cys Leu Gln Val Glu Asn Cys Thr Gln Leu Gly Glu Gln Cys
768 35 40 45
778 Trp Thr Ala Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys
783 50 55 60
793 Gly Cys Ser Leu Asn Cys Val Asp Asp Ser Gln Asp Tyr Tyr Val Gly
798 65 70 75 80
808 Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp Leu Cys Asn Ala Ser Gly
813 85 90 95
823 Ala His Ala Leu Gln Pro Ala Ala Ala Ile Leu Ala Leu Leu Pro Ala
828 100 105 110
838 Leu Gly Leu Leu Leu Trp Gly Pro Gly Gln Leu
843 115 120
858 <210> SEQ ID NO: 3
863 <211> LENGTH: 441
868 <212> TYPE: DNA
873 <213> ORGANISM: MURINE PSCA (mPSCA)
883 <400> SEQUENCE: 3
888 atgaagacag ttttttttat cctgctggcc acctacttag cctgcatcc aggtgctgct 60
893 ctgcagtgtg attcatgcac agcacagatg aacaacagag actgtctgaa tgtacagaac 120
898 tgcagcctgg accagcacag ttgctttaca tcgcgcatcc gggccattgg actcgtgaca 180
903 gttatcagta agggctgcag ctcacagtgt gaggatgact cggagaacta ctatttgggc 240
908 aagaagaaca tcacgtgctg ctactctgac ctgtgcaatg tcaacggggc ccacaccctg 300
913 aagccaccca ccaccctggg gctgctgacc gtgctctgca gcctgttgct gtggggctcc 360
918 agccgtctgt aggtctctggg agagcctacc atagcccgat tgtgaaggga tgagctgcac 420
923 tccacccccc cccacacag g 441
933 <210> SEQ ID NO: 4
938 <211> LENGTH: 123
943 <212> TYPE: PRT

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Output Set: N:\CRF3\12212001\I855153.raw

948 <213> ORGANISM: MURINE PSCA (mPSCA)
 958 <400> SEQUENCE: 4
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 978 Pro Gly Ala Ala Leu Gln Cys Tyr Ser Cys Thr Ala Gln Met Asn Asn
 983 20 25 30
 993 Arg Asp Cys Leu Asn Val Gln Asn Cys Ser Leu Asp Gln His Ser Cys
 998 35 40 45
 1008 Phe Thr Ser Arg Ile Arg Ala Ile Gly Leu Val Thr Val Ile Ser Lys
 1013 50 55 60
 1023 Gly Cys Ser Ser Gln Cys Glu Asp Asp Ser Glu Asn Tyr Tyr Leu Gly
 1028 65 70 75 80
 1038 Lys Lys Asn Ile Thr Cys Cys Tyr Ser Asp Leu Cys Asn Val Asn Gly
 1043 85 90 95
 1053 Ala His Thr Leu Lys Pro Pro Thr Thr Leu Gly Leu Leu Thr Val Leu
 1058 100 105 110
 1068 Cys Ser Leu Leu Leu Trp Gly Ser Ser Arg Leu
 1073 115 120
 1088 <210> SEQ ID NO: 5
 1093 <211> LENGTH: 131
 1098 <212> TYPE: PRT
 1103 <213> ORGANISM: HUMAN STEM CELL ANTIGEN (hSCA-2)
 1113 <400> SEQUENCE: 5
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 1123 1 5 10 15
 1133 Arg Ala Ser Ser Leu Met Cys Phe Ser Cys Leu Asn Gln Lys Ser Asn
 1138 20 25 30
 1148 Leu Tyr Cys Leu Lys Pro Thr Ile Cys Ser Asp Gln Asp Asn Tyr Cys
 1153 35 40 45
 1163 Val Thr Val Ser Ala Ser Ala Gly Ile Gly Asn Leu Val Thr Phe Gly
 1168 50 55 60
 1178 His Ser Leu Ser Lys Thr Cys Ser Pro Ala Cys Pro Ile Pro Glu Gly
 1183 65 70 75 80
 1193 Val Asn Val Gly Val Ala Ser Met Gly Ile Ser Cys Cys Gln Ser Phe
 1198 85 90 95
 1208 Leu Cys Asn Phe Ser Ala Ala Asp Gly Gly Leu Arg Ala Ser Val Thr
 1213 100 105 110
 1223 Leu Leu Gly Ala Gly Leu Leu Leu Ser Leu Leu Pro Ala Leu Leu Arg
 1228 115 120 125
 1238 Phe Gly Pro
 1243 130
 1258 <210> SEQ ID NO: 6
 1263 <211> LENGTH: 123
 1268 <212> TYPE: PRT
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 1283 <400> SEQUENCE: 6
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 1293 1 5 10 15
 1303 Pro Gly Thr Ala Leu Leu Cys Tyr Ser Cys Lys Ala Gln Val Ser Asn

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Input Set : N:\Crf3\RULE60\09855153.txt

Output Set: N:\CRF3\12212001\I855153.raw

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1308          20          25          30
1318 Glu Asp Cys Leu Gln Val Glu Asn Cys Thr Gln Leu Gly Glu Gln Cys
1323          35          40          45
1333 Trp Thr Ala Arg Ile Arg Ala Val Gly Leu Leu Thr Val Ile Ser Lys
1338          50          55          60
1348 Gly Cys Ser Leu Asn Cys Val Asp Asp Ser Gln Asp Tyr Tyr Val Gly
1353 65          70          75          80
1363 Lys Lys Asn Ile Thr Cys Cys Asp Thr Asp Leu Cys Asn Ala Ser Gly
1368          85          90          95
1378 Ala His Ala Leu Gln Pro Ala Ala Ala Ile Leu Ala Leu Leu Pro Ala
1383          100          105          110
1393 Leu Gly Leu Leu Leu Trp Gly Pro Gly Gln Leu
1398          115          120
1413 <210> SEQ ID NO: 7
1418 <211> LENGTH: 123
1423 <212> TYPE: PRT
1428 <213> ORGANISM: MURINE PSCA (mPSCA)
1438 <400> SEQUENCE: 7
1443 Met Lys Thr Val Leu Phe Leu Leu Leu Ala Thr Tyr Leu Ala Leu His
1448 1          5          10          15
1458 Pro Gly Ala Ala Leu Gln Cys Tyr Ser Cys Thr Ala Gln Met Asn Asn
1463          20          25          30
1473 Arg Asp Cys Leu Asn Val Gln Asn Cys Ser Leu Asp Gln His Ser Cys
1478          35          40          45
1488 Phe Thr Ser Arg Ile Arg Ala Ile Gly Leu Val Thr Val Ile Ser Lys
1493          50          55          60
1503 Gly Cys Ser Ser Gln Cys Glu Asp Asp Ser Glu Asn Tyr Tyr Leu Gly
1508 65          70          75          80
1518 Lys Lys Asn Ile Thr Cys Cys Tyr Ser Asp Leu Cys Asn Val Asn Gly
1523          85          90          95
1533 Ala His Thr Leu Lys Pro Pro Thr Thr Leu Gly Leu Leu Thr Val Leu
1538          100          105          110
1548 Cys Ser Leu Leu Leu Trp Gly Ser Ser Arg Leu
1553          115          120
1568 <210> SEQ ID NO: 8
1573 <211> LENGTH: 20
1578 <212> TYPE: DNA
1583 <213> ORGANISM: Artificial Sequence
1593 <220> FEATURE:
1598 <223> OTHER INFORMATION: Description of Artificial Sequence: RT-PCR PRIMER
1608 <400> SEQUENCE: 8
1613 ttctcctgct ggccacctac          20
1623 <210> SEQ ID NO: 9
1628 <211> LENGTH: 20
1633 <212> TYPE: DNA
1638 <213> ORGANISM: Artificial Sequence
1648 <220> FEATURE:
1653 <223> OTHER INFORMATION: Description of Artificial Sequence: RT-PCR PRIMER
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/855,153

DATE: 12/21/2001

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Input Set : N:\Crf3\RULE60\09855153.txt

Output Set: N:\CRF3\12212001\I855153.raw

L:598 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:603 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:608 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:628 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1